DX8 Programming Basics

Here are a few keys I learned recently if you're trying to use mixes with the DX8, particularly for setting up a sailplane:

1. Mixing to RFL and LFL, RAL and LFL don't actually mix to right flap, left flap, right aileron, and left aileron. Instead, RFL outputs to both flap channels, moving the outputs together as if connected by a Y-cable, and LFL moves both flap channels in opposite directions. The same goes for the aileron outputs. This is a good feature, but the labels are completely misleading, and this isn't even hinted at in the manual.

2. With the exception of one channel, the input to a mix has to be a receiver output, rather than a stick or switch position. So if you have one of your flaps connected to the Aux2 receiver channel, and you want to use the Aux2 transmitter switch to mix in some camber and reflex into all the flap and aileron channels, you're out of luck trying to do that directly. This also applies to the throttle channel. You can't use the throttle stick position as the input to a mix; you have to use the throttle output, after it's been affected by the throttle curve. This thwarted me on an earlier attempt to use one part of the range of motion for the real throttle, and another part of the range of motion to control flaps. There two indirect work-arounds to this limitation that I know of so far:

A. Use an unused receiver output channel (i.e. aux 3) as the input to the mix, and set up the Aux2 transmitter switch to control the Aux 3 channel using the switch selection dialog in the hold-the-roller-while-powering-up menu. The downside of this approach is that Aux 3 receiver output is now useless for any other purpose, like controlling a separate data logger, lights, etc.

B. Use the throttle receiver channel as the mix input, knowing that for a powered sailplane, the throttle will be in the same off position for all of the portions of the flight where you want to use the mix. Then use the flight mode switch to control when the mix is applied. To set up reflex and camber onto ailerons and flaps, you will need to use 4 mixes. First, set up the trims so that the surfaces are reflexed when no mix is applied. Then use 2 mixes to set the flaps and ailerons to neutral position when in FM1 or FM2, and another 2 mixes to add in more deflection to camber the flaps and ailerons when FM 2 is applied. The downside of this is that the FM switch is not as accessible as Aux2, and it chews up 4 mixes when no more than 2 should be required.

3. The exception mentioned above is the knob (a.k.a Aux 3), which can be used directly as an input to mixes, even if the Aux3 receiver function is controlled by another switch. Why this is true for knob/Aux 3 but not Aux 2 or any other switch/receiver channels is beyond me. But least it works for the knob, though I wish all transmitter switches/controls worked like that.

Since the wing type offers many different setup why not sellect what you have or want.

If you have 2 aileron servo on Y but want individual control of the flaps then select wing type **1 ail 2 flap**.

Then you connect your Y connected ailerons in the aileron channel and then connect 1 flap servo

in the AUX1 now renamed RFL and connect the other in AUX 2 now renamed LFL
Then go in the flap menu system and activate flaps.

Now if you need to reverse one of the flap servo you simply go into the servo setup menu and select reversing for the proper servo either R FLAP or L FLAP.

Originally Posted by **SPEKTRUM**

•**The DX8 features backward mixing**. If a master is mixed to the right (primary channel) like right aileron, the slave will operate both ailerons as an ailerons. If a master is mixed to a slave channel like the left aileron, the ailerons will operate up and down as flaperons. **Understanding the backwards mix function will allow tremendous options when doing complex mixes.**